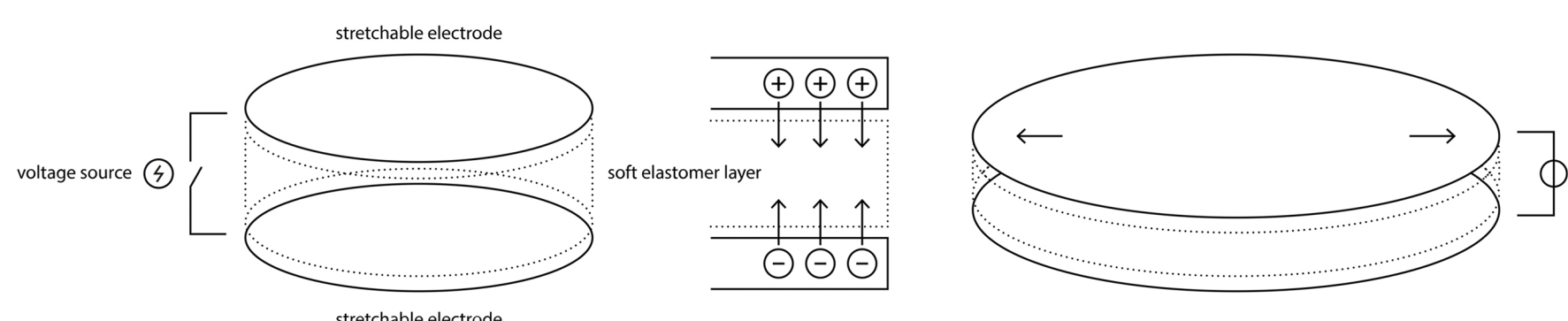


# Electroactive Polymer Transducer INNOVATIVE SOLUTION FOR NOVEL ACTUATION TECHNOLOGY

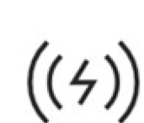
## WORKING PRINCIPLE

- Electromechanical transducer made of soft elastic polymer
- Electrical power converted to mechanical motion by elastic deformation
- Reliable electrostatic working principle for multipurpose and efficient operation



## A VERSATILE ACTUATION TECHNOLOGY

- EAPs can be used as sensors and actuators
- Flexible EAP portfolio for tailored applications
- Lab-scale production established
- Automated Industrial pilot production by 2024



**10N**

Max. actuation force



**5-7 %**

Max. contraction



**below 2ms**

Actuation time



**50 Hz**

Actuation frequency



**-40°C to +130°C**

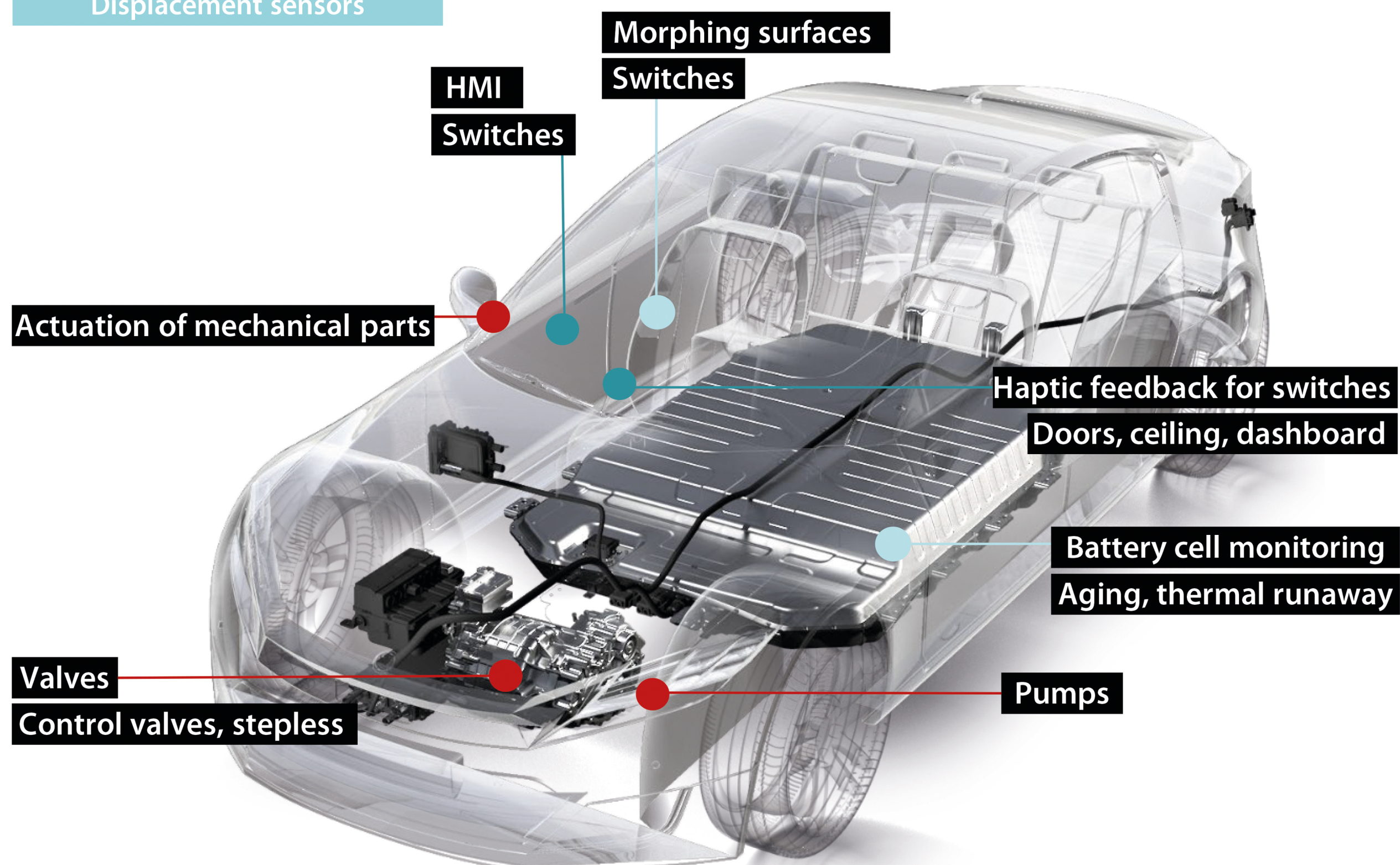
Temperature resistance

## APPLICATIONS

1. Valves
2. Haptic feedback interfaces
3. Locks
4. Shutters
5. Switches
6. Pumps and dosing systems

## EAPs IN AUTOMOTIVE

**Actuator**  
**HMI (Human machine interface)**  
**Displacement sensors**



## TECHNOLOGY BENEFITS

- Zero energy consumption when position holding
- Proportional positioning
- Simultaneous actuation and sensing
- Macro-scale strokes
- Noiseless actuation
- Compact, lightweight and low-cost devices
- Maintenance free for clean environment

## CONTACT US FOR FURTHER INFORMATION

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**DATWYLER**